

# PRODUCT DATA



TOLEDO FLOOR RESURFACING, INC.

## TFR ISCD

### USES:

TFR Industrial Strength Conductive SYSTEM contains conductive components designed to facilitate conductivity and dissipation of static electricity. TFR ISCD provides an easily cleanable, textured, seamless finish. TFR ISCD is especially applicable in facilities where spark and static control and cleanliness are essential; i.e. computer, electronics and pharmaceutical manufacturing.

Tensile >400 psi Concrete ASTM-D-454-85  
 Bond Strength >1500 psi Steel  
 Shore D 83

### PRODUCT DESCRIPTION:

TFR ISCD is a 1/4" flooring system composed of:

- PRIMER: Two component epoxy primer.
- TFR ISCD: Three component polymer system composed of resin, curing agent, and aggregate.
- PRIMER: Two component conductive epoxy primer.
- TOP COAT: TFR K-CD - a two-part hi-solids, low gloss, pigmented, conductive coating. Resistance of system is less than  $1 \times 10^5$  ohms. Resistance range is variable upon customer request.

## ACID/CHEMICAL RESISTANT GUIDE

The following results are based on 21 day immersions.

R = Resistant L = Limited Resistance  
 NR = Not Recommended

|                       |    |
|-----------------------|----|
| Ammonia 25%           | L  |
| Aromatic Hydrocarbons | L  |
| Butanol               | NR |
| Chromic Acid 40%      | NR |
| Citric Acid           | NR |
| Cyclohexane           | NR |
| Ethylene Glycol       | NR |
| Hydrochloric Acid 20% | L  |
| Jet Fuel              | L  |
| Kerosene              | L  |
| Methylene chloride    | NR |
| MIBK                  | NR |
| Nitric Acid 5%        | NR |
| Phosphoric Acid 5%    | NR |
| Potassium Hydroxide   | L  |
| Sulfuric Acid 20%     | R  |
| Waste Water, Sewage   | NR |
| Xylene                | R  |

### PHYSICAL/CHEMICAL CHARACTERISTICS

|                        |                                  |                            |                  |
|------------------------|----------------------------------|----------------------------|------------------|
| Working Properties:    | Service Time                     | Foot Traffic               | 8-12 hrs. (77°F) |
|                        |                                  | Light Vehicular            | 12 hrs. (77°F)   |
|                        |                                  | Maximum Durability         | 5-7 days (77°F)  |
| Mechanical Properties: | Compressive Strength             | 15519 psi                  | ASTM D-695       |
|                        | Flexural Strength                | 16302 psi                  | ASTM D-790       |
|                        | Tensile Strength                 | 6004 psi                   | ASTM D-638       |
|                        | Coefficient of Thermal Expansion | $3.5 \times 10^5$ in/in/°F | ASTM C-531       |

Toledo Floor Resurfacing Epoxy ISCD Flooring Systems are available in three standard colors.

# SPECIFICATIONS



TOLEDO FLOOR RESURFACING, INC.

## TFR ISCD

### CONDUCTIVE FLOORING

Toledo Floor Resurfacing Industrial Conductive Epoxy is a three component, seamless, Flooring System. The Conductive Epoxy system provides for outstanding static control with dissipation of static electricity.

The Conductive Floor Systems are distinguished for their high durability, abrasion resistance and use where static electricity, dust and spark resistance must be controlled. Applicability includes electronic assembly, manufacturing, packaging and testing facilities, computer and data processing facilities, pharmaceutical manufacturing, packaging and testing facilities, highly sensitive manufacturing and assembly facilities.

#### PART 1 GENERAL

##### 1) Qualifications

A. Contractor skilled and regularly engaging in manufacturing and installation of epoxy polymer flooring systems of similar size and nature for the past five years.

##### 2) Job Provisions

A. Concrete (standard six-bag mix) shall have a 28-30 day cure. Quick cure additives (High Early) may be used for a 5-10 day cure. Do not use a sealer on new concrete. Concrete shall have a rough, broom finish.

B. Utilities, air, electric, water, heat 50°-70°F (air), 50°F or greater (concrete) to be furnished by contractor or user.

C. Dock for unloading of material and equipment and disposal dumpster for non-toxic dust to be provided by contractor or user.

##### 3) Guarantee

A. With Toledo Floor Resurfacing's installation, workmanship and adhesion are guaranteed as specified.

#### PART 2 INSTALLATION

##### 1) Surface Preparation

All areas are mechanically steel shot blasted and/or scarified to remove all dirt, grease, loose and fatigued concrete; opening the pores of concrete to accept primer, fill material if necessary and overlayment.

##### 2) Surface Priming

A penetrating epoxy primer is applied to the abraded concrete.

##### 3) Surface Irregularities

Specially formulated epoxy fill material is trowelled into all holes and low spots to bring floor back to grade level as needed.

##### 4) Expansion and Control Joints

Joints 1/2" or greater are saw cut and filled with an elastomeric, flexible epoxy filler as needed.

##### 5) Installation of Overlayment

Specially formulated compounds with color pigment and graded silica sand is applied by trowelling or screed box application, to thickness of approximately 3/16" prior to power trowelling.

##### 6) Conductive Primer

A conductive primer is applied.

##### 7) Coating

A hi-solids, textured, pigmented conductive epoxy coating is applied to improve appearance of the complete system. Resistance range (ohms) variable upon customer requirements.

# CLEANING RECOMMENDATIONS



TOLEDO FLOOR RESURFACING, INC.

## PART 3 CLEANING RECOMMENDATIONS

TFR products are formulated for long wearability and low maintenance. Periodic cleaning is recommended to maintain the aesthetics of the system.

### INITIAL - AFTER CURE

Immediately after application, it is important to keep traffic and debris off the surface until the coating is fully cured (8-12 hours @ 77° F, unless otherwise stated by the manufacturer).

### MAINTENANCE

Epoxy Coatings - For cleaning: Warm water and a mild standard industrial detergent works well as a solution. For hi-builds, a squeegee or power scrubber (rider or walk behind) is recommended. If you have a slip resistant floor, a soft bristle scrub (push broom or light weight power scrubber) is recommended.

Conductive Coatings - Clean as above. **DO NOT** wax the surface. This will take away the conductivity of your coating.

**DO NOT** - Use solvents, lacquer thinners or alcohols as cleaning solutions. They may discolor and deteriorate the coatings physical and chemical properties.

**DO NOT** - Leave cleaning solutions or water puddled on floor, especially on fresh coating (3-7 days), as discoloration may occur.

**DO** - Follow Detergent Manufacturers Cleaning Instructions.